

**AMENDMENTS TO THE CLAIMS**

*The listing of claims will replace all prior versions and listings of claims in the application:*

**Listings of Claims:**

1.     **(Currently Amended)**     A method for analyzing a network, comprising:  
processing a data trace captured from the network to determine a network topology;  
processing the data trace to determine errors in a network conversation;  
processing the data trace to determine at least one metric for the network conversation;  
displaying an interface screen to the user, the interface screen comprising a graphical topology representation, a determined error representation, and a representation of at least one determined metric.
2.     **(Original)**     The method of claim 1, wherein displaying further comprises providing a link in the interface screen wherein a user may select devices in the determined network topology and link to a second display to view errors corresponding to the selected devices.
3.     **(Original)**     The method of claim 1, wherein displaying further comprises:  
allowing a user to select an analysis duration within the data trace in the interface screen;  
processing the trace data for the selected analysis duration to determine a state of each device in the network topology for a predetermined number of intervals in the analysis duration;  
and  
displaying at least one error and at least one metric for the analysis duration.
4.     **(Original)**     The method of claim 1, wherein displaying the determined error representation further comprises linking to a detailed error description in a second display when the user selects a particular error.

5.     **(Original)**   The method of claim 1, wherein displaying the determined error representation further comprises highlighting a portion of a metric graph that corresponds to a particular error when a user selects the particular error.

6.     **(Original)**   A method for analyzing a network and displaying analysis results to a user in an interactive display, comprising:

capturing a data trace from the network with at least one analyzer;

processing the data trace to determine a topology of the network;

processing the data trace to determine the presence of errors in communications between devices in the network topology; and

displaying a graphical user interface to the user, the graphical user interface comprising topology information, determined error information, and metric information.

7.     **(Original)**   The method of claim 6, wherein displaying topology further comprises displaying a graphical representation of each detected device of the network topology.

8.     **(Original)**   The method of claim 7, further comprising linking the user to a second display screen containing errors determined in association with a particular device in the topology when the user selects the particular device in the first display.

9.     **(Original)**   The method of claim 8, further comprising linking the user to a third screen having a description of a particular error when the user selects the particular error on the second display screen.

10.    **(Original)**   The method of claim 9, wherein displaying metrics comprises highlighting a portion of the displayed metric corresponding to the particular error.

11.    **(Original)**   The method of claim 10, further comprising allowing the user to define a viewing duration and redisplaying the metrics using the user defined duration.

12. **(Original)** The method of claim 11, wherein redisplaying the metrics further comprises recalculating a state of each device in the network for a plurality of intervals within the user selected duration and displaying the metrics for each of the intervals.

13. **(Original)** The method of claim 6, wherein the processing steps further comprise filtering the trace data to eliminate invalid data prior to generating the topology or error lists.

14. **(Currently Amended)** A method for analyzing a network and presenting the network analysis to the user, comprising:

determining a network topology;

determining communication errors between devices in the network topology;

determining at least one communication metric;

displaying the determined network topology to the user; and

providing links between each device in the determined topology and determined errors corresponding to each device, each link operating to display a screen illustrating a description of the error for the device and the location of the error in the network topology, communication metric.

15. **(Original)** The method of claim 14, wherein determining network topology comprises analyzing a network data trace for device indicators.

16. **(Original)** The method of claim 14, further comprising displaying the at least one communication metric in a graph.

17. **(Original)** The method of claim 14, further comprising providing a selection window for the user to select an analysis duration, recalculating the errors and metrics for a plurality of intervals in the analysis duration, and displaying the errors and metrics for the analysis duration to the user.

18. **(Original)** The method of claim 14, wherein determining a network topology and determining communication errors further comprises filtering trace data for invalid communications.
19. **(Original)** The method of claim 18, further comprising determining the topology, network errors, and the metrics based on the filtered trace data.
20. **(Original)** The method of claim 14, further comprising providing a selection window where the user can select metrics for inclusion in a graphical representation of the metrics.